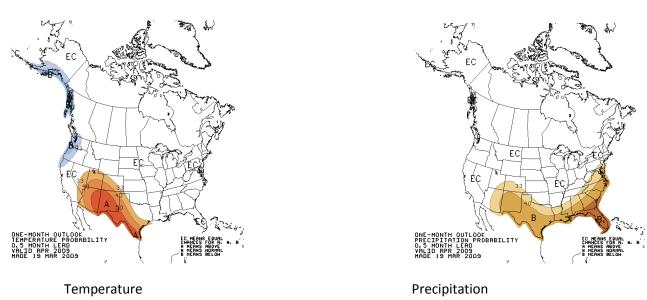
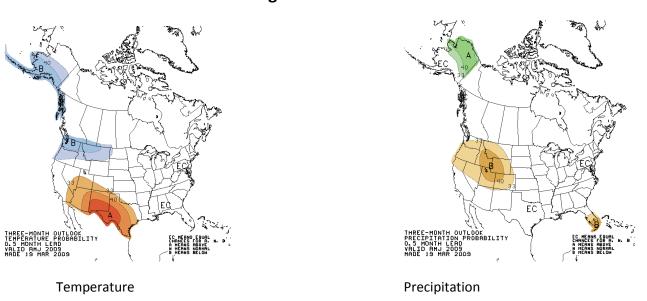
### **April – June 2009 Temperature and Precipitation Outlooks**

Below are the latest official probabilistic outlooks from the Climate Prediction Center (CPC) for April temperatures and precipitation, and the average for the April through June three month period.

#### **APRIL 2009 OUTLOOKS**



#### **APRIL through JUNE 2009 OUTLOOKS**



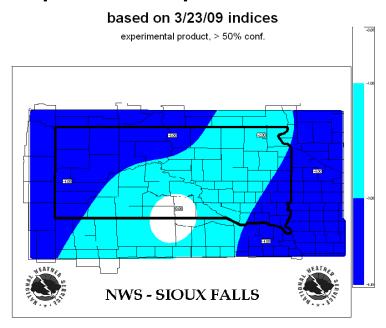
In the above CPC outlooks, there are equal chances (EC) for above normal, normal and below normal temperatures and precipitation for South Dakota and the surrounding portions of Iowa, Minnesota, and Nebraska in the WFO FSD forecast area (33.3 percent chance of any category happening).

The shaded areas on these maps indicate where there is a higher probability of above normal or below normal values. For example, on the April temperature outlook, there is a 50 percent chance of seeing above normal temperatures in extreme southwestern Texas and southern New Mexico. There is still a 33 percent chance of normal temperatures, and a 17 percent chance of below normal temperatures in that region.

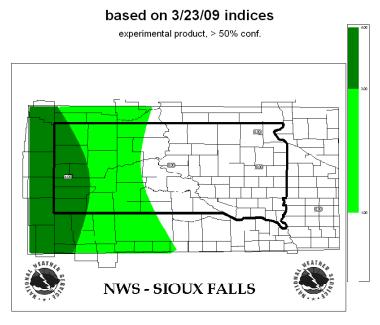
## **Experimental WFO FSD Outlooks**

The following images show the "best-guess" outlooks developed at WFO FSD. They are based on a combination of the output from several neural networks, comparing historical data from years with similar values and trends of multiple climate indices (analogs), and looking at the correlations of several observed climate indices with future observed temperatures and precipitation based on historical data from over 55 years. Red is for above normal temperatures, blue is below normal temperatures, green is above normal precipitation, and brown is below normal precipitation.

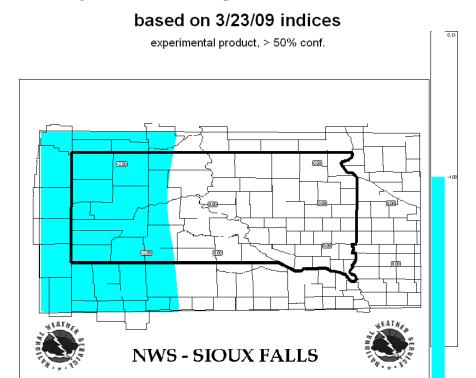
## **April 2009 Temperature Outlook**



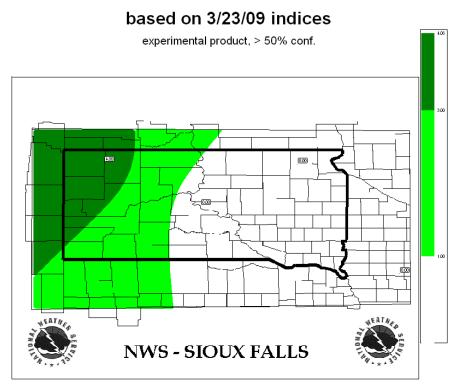
## **April 2009 Precipitation Outlook**



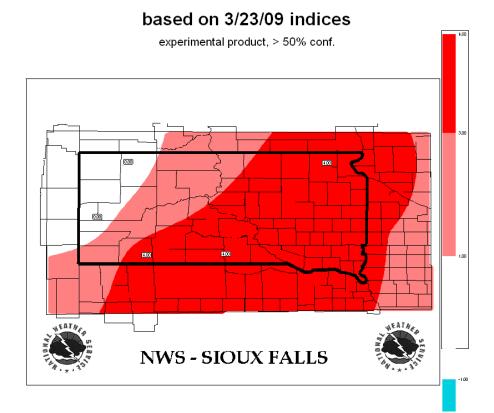
# **May 2009 Temperature Outlook**



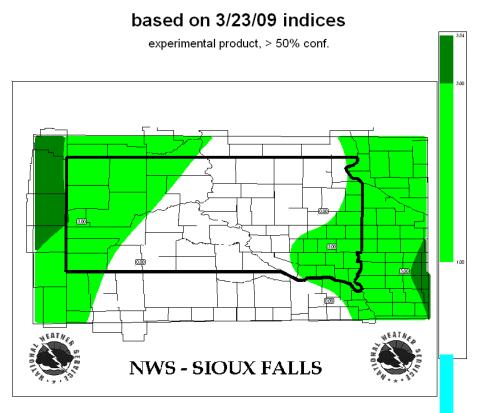
# **May 2009 Precipitation Outlook**



# **June 2009 Temperature Outlook**



# **June 2009 Precipitation Outlook**



## **Outlook Summary**

### APRIL TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	43.2	NORMAL	40%
North-central SD	43.1	BELOW	60%
Northeast SD	43.0	BELOW	60%
Black Hills	40.3	BELOW	60%
Southwest SD	45.3	BELOW	40%
Central SD	45.3	BELOW	40%
East-Central SD	44.5	BELOW	40%
South-Central SD	46.1	NORMAL	60%
Southeast SD	47.2	BELOW	40%
Northwest IA	46.1	NORMAL	40%
Southwest MN	44.8	BELOW	60%
Northeast NE	48.6	BELOW	60%

### APRIL PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	1.62	ABOVE	40%
North-central SD	1.87	ABOVE	40%
Northeast SD	2.08	NORMAL	60%
Black Hills	2.33	ABOVE	60%
Southwest SD	1.85	ABOVE	20%
Central SD	1.95	NORMAL	80%
East-Central SD	2.20	NORMAL	80%
South-Central SD	2.34	BELOW	20%
Southeast SD	2.48	NORMAL	40%
Northwest IA	2.71	NORMAL	80%
Southwest MN	2.57	NORMAL	40%
Northeast NE	2.57	NORMAL	20%

#### MAY TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	54.8	BELOW	60%
North-central SD	55.8	BELOW	40%
Northeast SD	56.1	NORMAL	60%
Black Hills	50.8	NORMAL	40%
Southwest SD	56.5	BELOW	60%
Central SD	57.4	NORMAL	60%
East-Central SD	57.0	NORMAL	60%
South-Central SD	57.7	NORMAL	60%
Southeast SD	59.3	NORMAL	60%
Northwest IA	58.9	NORMAL	80%
Southwest MN	57.8	NORMAL	80%
Northeast NE	60.2	NORMAL	40%

### MAY PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	2.72	ABOVE	60%
North-central SD	2.74	ABOVE	40%
Northeast SD	2.82	NORMAL	40%
Black Hills	3.66	ABOVE	40%
Southwest SD	2.98	ABOVE	40%
Central SD	2.76	NORMAL	40%
East-Central SD	3.02	ABOVE	40%
South-Central SD	3.32	ABOVE	60%
Southeast SD	3.44	NORMAL	40%
Northwest IA	3.67	BELOW	40%
Southwest MN	3.35	BELOW	40%
Northeast NE	3.96	ABOVE	40%

### JUNE TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	64.5	NORMAL	60%
North-central SD	65.4	ABOVE	40%
Northeast SD	65.6	ABOVE	60%
Black Hills	60.3	NORMAL	60%
Southwest SD	66.3	ABOVE	60%
Central SD	67.3	NORMAL	40%
East-Central SD	66.8	NORMAL	40%
South-Central SD	67.6	ABOVE	60%
Southeast SD	69.2	ABOVE	40%
Northwest IA	68.5	ABOVE	40%
Southwest MN	67.5	NORMAL	40%
Northeast NE	70.2	ABOVE	20%

#### JUNE PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	3.08	ABOVE	20%
North-central SD	3.28	NORMAL	40%
Northeast SD	3.50	NORMAL	20%
Black Hills	3.63	ABOVE	60%
Southwest SD	3.12	NORMAL	60%
Central SD	3.17	BELOW	40%
East-Central SD	3.84	NORMAL	60%
South-Central SD	3.52	BELOW	40%
Southeast SD	3.74	ABOVE	60%
Northwest IA	4.48	ABOVE	60%
Southwest MN	4.12	NORMAL	40%
Northeast NE	4.16	NORMAL	60%

DISCLAIMER: WFO FSD is developing local 1 to 3 month outlooks of temperature and precipitation. These outlooks are experimental and still being tested and developed. They are being provided to give more details and a more deterministic outlook for South Dakota and the portions of Minnesota, lowa, and Nebraska in the FSD forecast area. They are not intended to compete with or replace the official NOAA outlooks issued by the Climate Prediction Center (CPC), which are probabilistic. For more details on how these outlooks are prepared, or if you have any questions concerning these outlooks, please feel free to contact the WFO FSD Climate Services Focal Point Mike Gillispie.